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INFOSYSTEMS

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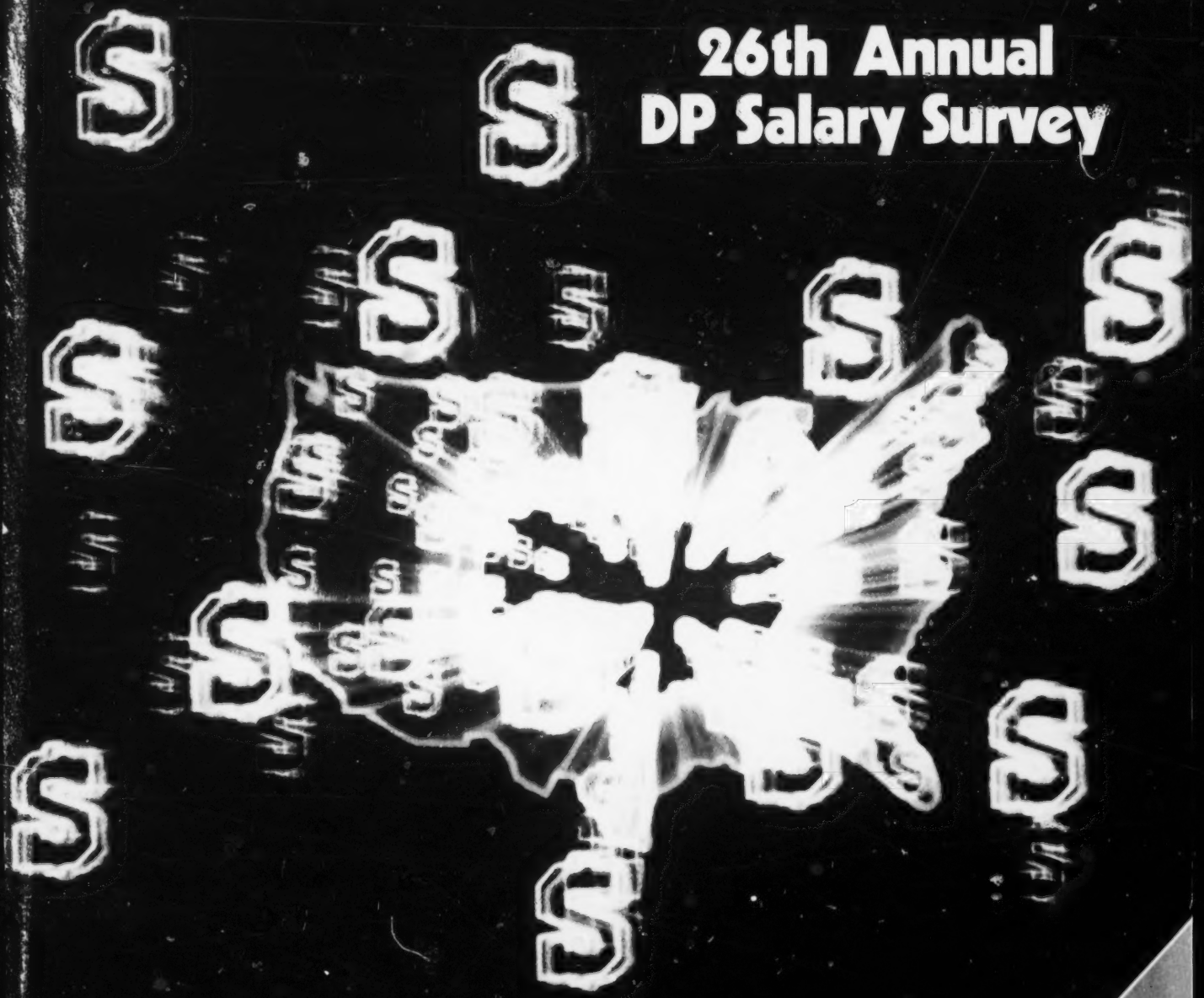
Part 1

26th Annual DP Salary Survey



Producing Viable MIS Reports

The Digital Connection

Is Information Center the Best Answer?

Computing Chrysler's Profitability

INFOSYSTEMS

Part 1 June 1984 Volume 31 Number 6

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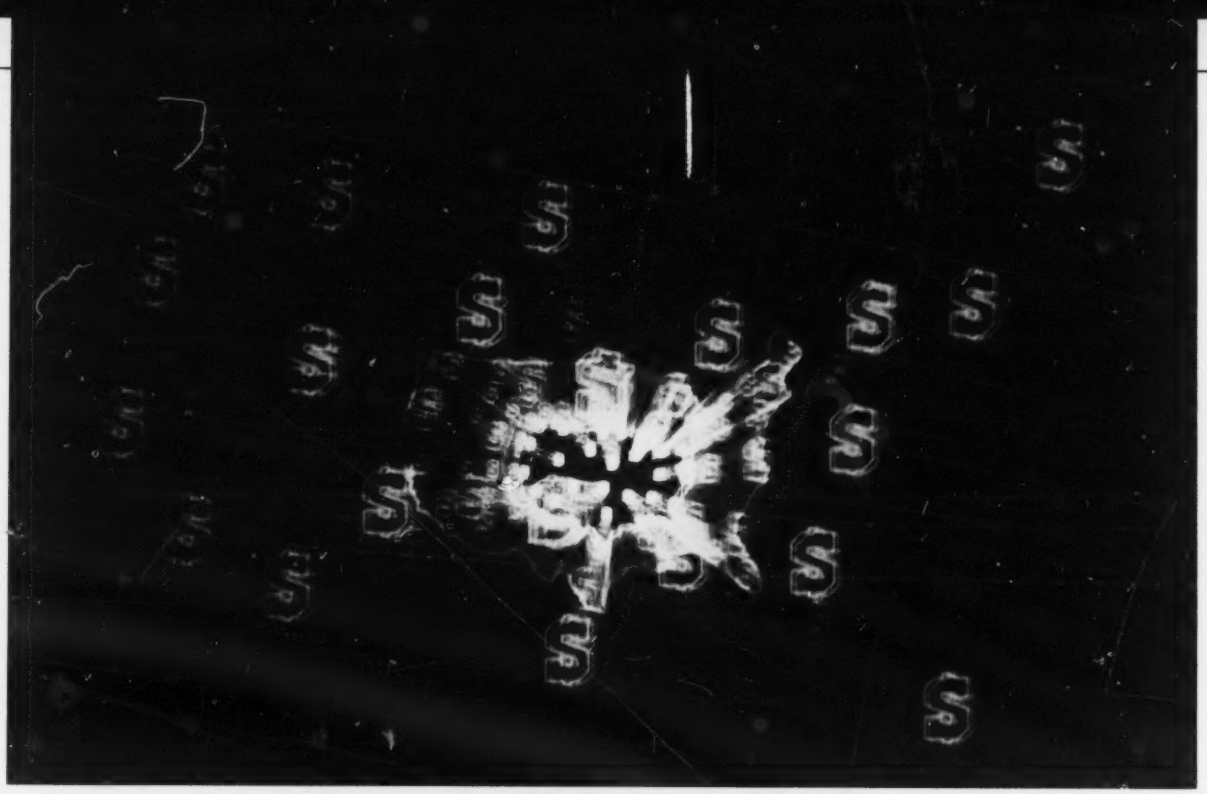


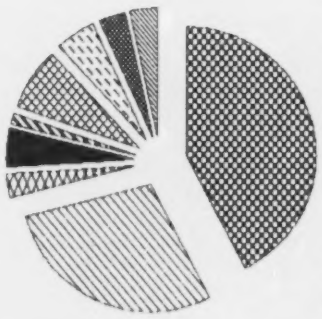
26th Annual DP Salary Survey

On the Rise Again

Salaries are beginning to mirror the rising economy judging by responses to INFOSYSTEMS' 26th Annual Survey.

By Karen Beagley, Associate Editor
and Raymond S. Winkler
Manager of Market Research, Hitchcock Marketing Services

Average Percent of 1984 DP Budget



-Personnel	42.50
-Hardware & Maintenance	28.40
-Systems Software	3.10
-Applications Software	4.90
-Maintenance Software	1.50
-Supplies	7.80
-Outside Services	5.00
-Data Communications	3.30
-Other	3.50

TOTAL: 100.00

Data processing (DP) salaries increased 6.9 percent from 1983 to 1984, according to INFOSYSTEMS' 26th Annual Salary Survey. This increase indicates that salaries are beginning to rise again with the improving economy. Salary increases are still down, however, from 1981 when a 12.8 percent boost was reported. Last year's salary survey reported an increase of only 5.1 percent.

INFOSYSTEMS' 1984 survey is based on responses from 972 firms drawn from the top 50 US metropolitan areas according to computer installations and usage. The respondents reported on salaries (excluding benefits and bonuses) for 10,581 full-time positions. These salaries were in effect on March 1, 1984.

In addition to salary information, the survey—which was conducted by Hitchcock Marketing Services, Wheaton, IL—gathered information about several other budgetary and computer opera-

tions matters. For instance, the salaries for the three largest metropolitan areas were broken down by city and suburbs. It showed an average 7.1 percent difference between the two locales within each area. New York City reported the widest disparity at 13.1 percent higher in the city. Los Angeles showed the smallest difference at 3.3 percent higher in the city. Chicago reported 6.9 percent difference, city over suburbs.

In 1979, only 5.4 percent of the respondents stated that the DP manager reported to a director of information systems. This year, the number indicating such a relationship reached 11 percent. That represents a 104 percent increase in the use of the title—and probably indicates the increased importance of computing to the organization.

A similarly impressive growth was shown in the area of data base management activities. In 1979, 15 percent of the respondents said the person responsible for the activity reported to the director of information systems. In 1984, the number had reached 27.2 percent. That figure has manifested consistent growth through the six-year period.

The survey reported a reduction in the average number of employees in the DP department over the past six years. These reductions follow the periods in which the economy was down, especially in 1982 and 1983. The same trend is reflected by the total number of employees in those organizations. The interesting statistic, however, is that in 1979, DP represented just over 1 percent of the employees in an organization. In 1984, the number was closer to 2 percent.

In the breakout of budget items, personnel still commands the lion's share at 42.5 percent. Other items and their percentages are as follows: hardware (and maintenance) 28.4; software, 9.5; supplies, 7.8; outside services, 5; and datacomm, 3.3.

Software has shown a significant increase in its share of the budget over the years. That 9.5 percent reported this year represents a 61 percent rise since 1981 when it took up 5.9 percent of the budget.

This year, for the first time, the survey broke software expenditures into three categories: systems software, applications and maintenance. Applications took the largest share of the pie by far at 52 percent. Systems expenditures came in at 33 percent of the budget and maintenance at 16 percent.

The budget shares of personnel and hardware have held surprisingly steady through the years. In 1979, respondents reported personnel consuming 43.8 percent of the budget; in 1984, 42.5 percent. Hardware claimed 29.6 percent in 1979 and 28.4 percent this year; that does, however, represent the lowest figure ever reported on hardware.

An average 11.7 percent of new employees were reported on staffs due to turnover in existing positions. More than two-thirds of the respondents said that turnover was about the same as previous years. Seventeen percent considered it a decrease and 14 percent called it an increase over prior years.

Nearly 26 percent of the respondents stated that they have one or more unfilled salaried, nonclerical DP positions. The average number of positions unfilled was 2.3.

INFOSYSTEMS asked the questionnaire's recipients to rate eight sources for finding DP personnel. Promotion from within the DP department itself was the clear winner. The second and third choices, respectively—and significantly ahead of others on the list—were referrals and advertisements.

On average weekly salaries, the largest increase was reported among systems analysts. The top ranking among four categories received a 16.1 percent increase over last year. The next highest growth came among applications programmers at 14.7 percent compared with 1983. The systems analyst salary was $799 per week; the applications programmer, $709. Systems programmers also had a healthy increase at 11.1 percent to $743 per week.

The top DP management position reported a 7.3 percent increase over 1983 to $1,029 per week. Some areas of systems programming, datacomm and data entry showed decreases, but all had shown substantial increases between 1982 and 1983.

The highest reported annual salary for the top information systems official is $96,000. That is being paid to a Vice President of Operations. That salary does not have a maximum range, by the way. The highest salary paid to someone with an information systems title is $70,000, paid to an MIS Director. That respondent said the maximum salary is $80,000. (IN)

Number of Employees In DP vs. Company
(By Equipment Rental)

Rental Range Per Month	Average Number In DP	Average Number In Company
Under $3,000	3.5	186.4
$3,000 to $4,499	4.7	248.7
$4,500 to $5,999	5.4	421.4
$6,000 to $8,599	5.9	439.0
$9,000 to $11,999	7.9	549.8
$12,000 to $14,999	10.7	610.8
$15,000 to $17,999	12.4	677.5
$18,000 to $24,999	16.9	970.0
$25,000 to $49,999	21.0	1990.3
$50,000 to $74,999	27.4	2287.2
$75,000 to $99,999	35.1	2362.9
$100,000 to $149,999	63.2	3605.8
$150,000 or more	244.8	14259.0
Not available	9.4	155.0
All companies	20.2	1343.9

Sources of Finding DP Personnel (In order of importance)

Rank	Source
1	Promotions within DP
2	Referrals
3	Advertisements
4	Retraining-upgrading other workers
5	Personnel agencies
6	Colleges & universities
7	Other departments
8	Computer schools
9	Other

Job Descriptions Available

Detailed job descriptions for the 35 DP positions surveyed are available free of charge. For a copy Enter No. 450 on the Reader Information Card.

Additional Reprints

Additional copies of the DP Salary Survey in this issue are available for $7.50 each. In quantities of 10 or more, the cost is $5. Send your check or company purchase order to Hitchcock Executive Book Service, Hitchcock Building, Wheaton, IL 60188.

26th Annual DP Salary Survey

Average Reported Weekly Salaries for All Infosystems Jobs by Geographic Area

AVERAGE REPORTED WEEKLY SALARIES FOR ALL INFOSYSTEMS JOBS BY GEOGRAPHIC AREA

Job Description	Job Code	Region Area: New England ME, VT, NH, MA, CT, RI	Mid Atlantic NY, PA, NJ	So. Atlantic WV, MD, DE, VA, NC, SC, GA, FL, DC	East North Central WI, MI, IL, IN, OH	East South Central KY, TN, MS, AL	West North Central ND, MN, SD, NB, IA	West South Central TX, OK, AR, LA	Mountain UT, MT, ID, NV, WY, CO, AZ, NM	Pacific WA, OR, CA	National Average Comparison 1983	1984	% Increase Decrease	
MANAGEMENT		(41)	(152)	(130)	(206)	(24)	(65)	(87)	(40)	(158)	1,176	905		← (No. Firms)
Top MIS Official	(01)	1045	1059	955	991	921	1034	1177	871	1110	959	1029	7.3	
Data Base Systems	(02)	855	802	719	647	**	604	697	777	672	648	702	8.3	
Data Processing	(03)	697	751	737	689	631	691	748	748	732	670	721	7.6	
Ass't D.P.	(04)	606	635	688	575	**	500	680	676	684	627	663	5.7	
Project/Team Leader														
Leader	(05)	725	769	749	628	565	649	763	631	721	656	707	7.8	
Systems Analysis and Programming														
Manager/Supervisor	(06)	672	778	783	713	621	687	776	728	710	691	732	5.9	
Lead	(07)	632	676	667	549	515	593	634	602	663	567	613	8.1	
Senior	(08)	560	585	568	483	441	519	595	529	606	515	550	6.8	
Junior	(09)	487	466	475	428	348	403	497	450	498	408	445	9.1	
Systems Analysis														
Manager/Supervisor	(10)	**	673	870	808	**	**	**	730	821	688	799	16.1	
Lead	(11)	**	664	729	555	**	532	571	701	699	609	611	0.3	
Senior	(12)	488	587	662	530	479	508	529	563	673	570	591	3.7	
Junior	(13)	**	487	520	430	**	414	369	**	583	513	520	1.4	
Systems Programming														
Manager/Supervisor	(20)	777	744	769	642	626	771	823	**	808	669	743	11.1	
Lead	(21)	643	669	601	624	497	564	667	722	701	579	644	11.2	
Senior	(22)	581	541	574	524	447	505	589	623	689	526	573	8.9	
Junior	(23)	396	399	443	403	388	375	488	540	572	430	444	3.3	
Trainee	(24)	**	328	361	333	**	**	346	341	375	345	344	−0.3	
Applications Programming														
Manager/Supervisor	(25)	**	649	758	624	**	651	671	**	841	618	709	14.7	
Lead	(26)	**	577	550	504	425	500	512	519	704	524	545	4.0	
Senior	(27)	483	493	489	465	394	446	445	505	532	452	467	3.3	
Junior	(28)	416	417	397	383	387	337	389	434	427	364	392	7.7	
Trainee	(29)	345	337	295	340	234	317	382	356	397	308	339	10.1	
Data Communications														
Manager	(30)	**	719	566	672	557	**	565	**	563	619	612	−1.1	
Operator	(31)	**	448	373	374	**	**	326	418	384	367	390	6.3	
Computer Operations														
Manager/Supervisor	(32)	565	530	542	530	471	503	550	524	518	488	531	8.8	
Lead Operator	(33)	385	379	388	372	317	351	375	406	428	358	382	6.7	
Senior Operator	(34)	347	332	329	344	290	307	335	351	365	325	340	4.6	
Junior Operator	(35)	298	282	267	270	238	248	271	300	340	271	282	4.1	
I/O Control Manager	(36)	336	347	405	363	269	260	377	415	461	333	366	9.9	
Tape Librarian	(40)	317	305	319	280	**	225	295	313	369	282	301	6.7	
Key Entry														
Supervisor	(41)	407	367	359	365	256	328	379	334	414	330	362	9.7	
Lead Operator	(42)	294	302	299	293	246	263	300	289	380	274	294	7.3	
Senior Operator	(43)	284	259	255	274	222	254	268	254	342	253	277	9.5	
Junior Operator	(44)	217	215	234	226	218	226	222	220	239	222	218	−1.8	

** Indicates insufficient information available

Complete DP Salary Survey

A complete copy of the INFOSYSTEMS 1984 DP Salary Survey is available. The report includes replies to the 20 questions in the study by industry and by equipment rental range, as well as salary data for the 35 job functions broken out by major metropolitan areas. It can be ordered for $50. Send your check or company purchase order to Hitchcock Executive Book Service, Hitchcock Building, Wheaton, IL 60188.

26th Annual DP Salary Survey

Weekly Salaries for All Infosystems Jobs: Nationwide and by Size of Installation

Job Description	Job Code	NATIONAL STATISTICS										AVERAGE SALARY—BY EQUIPMENT RENTAL RANGE													
		Number Reported	Lowest Reported Actual Salary	25th Percentile* Actual Salary	National Average Actual Salary	Median* Actual Salary	Mode* Actual Salary	75th Percentile* Actual Salary	Highest Reported Actual Salary	Established Salary Range—Average Low	Established Salary Range—Average High	Under $3,000/Mo.	$3,000-4,499/Mo.	$4,500-5,999/Mo.	$6,000-8,999/Mo.	$9,000-11,999/Mo.	$12,000-14,999/Mo.	$15,000-17,999/Mo.	$18,000-24,999/Mo.	$25,000-49,999/Mo.	$50,000-74,999/Mo.	$75,000-99,999/Mo.	$100,000-149,999/Mo.	$150,000 and over	— (No. Firms)
MANAGEMENT												(124)	(103)	(76)	(113)	(72)	(94)	(40)	(68)	(99)	(42)	(21)	(18)	(30)	
Top MIS Official	(01)	161	475	865	1029	961	961	1150	2308	852	1224	**	847	891	976	941	991	953	1012	1044	974	1319	1338	1202	
Data Base Systems	(02)	58	323	576	702	685	692	791	1250	594	858	**	433	557	471	635	695	**	812	718	744	816	850	745	
Data Processing	(03)	726	260	596	721	715	769	840	1336	610	854	588	610	635	683	717	738	744	781	832	864	868	894	968	
Ass't DP	(04)	124	225	553	663	663	663	769	1130	518	736	**	387	463	511	542	569	572	662	722	724	788	819	939	
Project/Team Leader																									
Leader	(05)	248	346	615	707	676	692	769	1115	572	827	632	**	**	595	553	607	658	648	696	687	813	743	743	
Systems Analysis and Programming																									
Manager/Supervisor	(06)	241	389	632	732	705	632	832	1384	592	858	664	659	624	607	639	632	603	772	757	742	848	888	710	
Lead	(07)	416	184	543	613	591	563	688	1033	500	712	524	547	550	524	521	598	559	609	639	592	739	670	605	
Senior	(08)	773	208	484	550	538	506	615	1019	451	645	443	477	489	523	511	517	513	526	585	546	617	553	539	
Junior	(09)	603	165	387	445	423	387	505	734	376	549	395	410	446	382	396	404	424	426	444	427	483	512	431	
Systems Analysis																									
Manager/Supervisor	(10)	22	575	673	799	787	961	932	1019	677	939	**	**	**	**	**	**	**	**	814	**	810	838	899	
Lead	(11)	211	326	505	611	600	495	701	986	549	781	**	**	**	**	**	595	**	778	695	692	661	743	704	
Senior	(12)	79	286	500	591	511	511	701	958	487	676	**	455	393	**	561	490	**	608	625	576	580	683	620	
Junior	(13)	122	269	424	520	556	600	600	692	420	580	**	**	**	307	**	485	**	568	547	518	528	553	537	
Systems Programming																									
Manager/Supervisor	(20)	98	325	669	743	742	692	846	1250	611	883	**	**	**	574	**	582	630	775	739	697	789	817	829	
Lead	(21)	111	390	579	644	621	590	717	995	534	769	**	**	**	474	550	544	585	713	654	603	695	692	661	
Senior	(22)	193	180	519	573	557	534	650	969	498	719	408	378	466	397	445	477	576	604	613	508	635	609	588	
Junior	(23)	132	201	375	444	465	465	518	703	394	561	**	260	279	317	274	393	395	376	461	431	506	535	475	
Trainee	(24)	76	266	294	344	326	326	365	519	346	495	**	**	**	**	**	302	**	294	**	374	**	382	322	
Applications Programming																									
Manager/Supervisor	(25)	57	346	525	709	673	673	846	1154	568	832	598	**	**	515	628	600	**	699	767	686	707	860	872	
Lead	(26)	137	230	451	545	519	480	610	906	450	614	579	495	471	490	468	494	566	577	626	**	651	678	661	
Senior	(27)	581	138	372	467	463	348	532	961	410	584	395	351	419	430	443	449	462	484	498	469	564	526	392	
Junior	(28)	559	165	326	392	384	313	442	663	335	473	344	307	349	332	382	368	344	423	385	435	490	428	340	
Trainee	(29)	259	143	278	339	326	278	415	542	305	422	**	299	246	268	262	291	316	358	302	315	391	364	364	
Data Communications																									
Manager	(30)	42	323	461	612	596	461	692	1150	545	759	**	**	**	334	**	**	**	621	568	602	743	624	719	
Operator	(31)	87	173	320	390	384	384	442	673	354	529	312	**	**	276	**	261	**	413	366	379	468	420	482	
Computer Operations																									
Manager/Supervisor	(32)	359	192	420	531	530	576	625	1096	455	649	410	395	432	448	445	499	443	557	549	602	668	638	632	
Lead Operator	(33)	474	165	309	382	365	384	439	807	313	449	320	333	316	314	373	348	325	392	393	380	400	480	469	
Senior Operator	(34)	871	174	288	340	332	346	375	650	284	398	302	306	291	307	338	305	309	359	335	364	343	372	388	
Junior Operator	(35)	685	126	240	282	276	282	315	650	240	334	265	249	240	244	265	256	244	291	281	295	294	306	323	
I/O Control Manager	(36)	181	160	288	366	315	315	425	972	334	476	273	230	**	336	419	352	252	375	384	360	487	464	373	
Tape Librarian	(40)	100	146	253	301	288	288	338	550	256	360	**	**	272	**	**	**	**	296	289	280	299	329	308	
Key Entry																									
Supervisor	(41)	181	200	311	362	341	313	410	692	309	434	300	301	326	303	362	336	309	345	395	393	412	421	431	
Lead Operator	(42)	343	122	265	294	288	265	323	525	252	352	268	253	304	283	281	280	259	286	301	303	337	354	355	
Senior Operator	(43)	963	126	238	277	262	249	310	494	226	315	255	243	248	257	274	256	250	264	281	276	287	281	321	
Junior Operator	(44)	358	108	182	218	215	182	246	500	201	276	224	197	232	231	200	203	208	247	215	234	245	251	261	

* *Median—A figure having an equal number above and below*
* *Mode—The salary reported most often*
* *25th Percentile—That point at which 25% of all other salaries are lower and 75% are higher*
* *75th Percentile—That point at which 75% of all other salaries are lower and 25% are higher*

** Indicates insufficient information available

26th Annual DP Salary Survey

Average Reported Weekly Salaries for All Infosystems by Industry

AVERAGE REPORTED WEEKLY SALARIES FOR ALL INFOSYSTEMS JOBS BY INDUSTRY

Manufacturing and Processing

Job Description	Job Code	Advertising, Printing & Publishing	Banks	Educational	Engineering, Construction	Governmental Agencies	Hospital, Health Care	Insurance	Financial	Retail Sales & Distrib.	Data Proc. Service Centers	Other Services (non-DP)	Transportation	Wholesale Sales & Distrib.	Electrical, Electronic	Food, Tobacco, Drugs	Machinery, Instruments, Equip.	Metal Producing & Fab.	Apparel, Textiles	Lumber, Wood, Furn., Paper	Chemicals, Petro., Coal	Rubber, Leather, Glass, Clay	Other
MANAGEMENT		(28)	(25)	(56)	(25)	(85)	(36)	(31)	(23)	(62)	(40)	(72)	(28)	(79)	(52)	(27)	(56)	(55)	(15)	(12)	(29)	(21)	(17)
Top MIS Official	(01)	1129	922	877	**	978	989	1157	1252	1108	972	1188	1108	1080	1015	**	1009	901	932	977	1076	768	903
Data Base Systems	(02)	720	**	667	**	729	647	**	614	**	682	677	**	659	**	**	**	625	**	**	**	**	**
Data Processing	(03)	710	735	677	745	760	712	712	811	704	677	718	770	656	769	699	705	692	808	711	791	658	793
Ass't D P	(04)	549	656	581	**	719	**	**	686	**	579	**	**	522	663	612	662	546	**	**	**	**	571
Project/Team Leader																							
Leader	(05)	673	696	639	692	727	680	699	673	732	640	559	780	596	845	**	707	614	622	641	**	**	**
Systems Analysis and Programming																							
Manager/Supervisor	(06)	727	664	597	**	759	763	698	825	740	704	665	794	758	792	**	749	676	617	718	759	668	738
Lead	(07)	631	653	500	585	626	557	621	700	654	590	598	699	592	731	668	613	596	591	582	709	575	568
Senior	(08)	533	587	493	569	526	481	541	609	551	515	537	640	505	642	509	544	526	510	495	603	505	527
Junior	(09)	406	517	360	471	410	381	446	492	455	362	391	544	424	497	383	374	435	418	411	528	475	417
Systems Analysis																							
Manager/Supervisor	(10)	**	**	**	**	874	**	**	**	865	**	**	**	**	**	**	690	**	**	**	740	**	**
Lead	(11)	**	**	510	**	782	**	653	**	**	**	**	741	586	**	**	594	557	**	576	688	**	**
Senior	(12)	**	**	495	**	638	576	497	**	576	484	503	625	528	**	595	523	506	546	**	586	**	**
Junior	(13)	**	**	418	**	481	387	**	**	**	**	471	586	384	369	**	**	**	**	**	**	**	**
Systems Programming																							
Manager/Supervisor	(20)	734	731	699	**	721	695	720	**	758	767	**	786	815	722	**	713	659	**	**	606	**	691
Lead	(21)	607	687	552	**	630	603	652	666	616	707	643	723	713	697	**	682	617	**	**	**	**	**
Senior	(22)	**	610	502	**	563	544	552	571	472	496	538	686	505	607	**	547	527	440	**	526	512	**
Junior	(23)	**	490	375	**	465	450	452	**	453	338	304	563	367	434	**	519	423	**	**	445	**	402
Trainee	(24)	302	**	**	**	323	**	**	**	**	317	**	**	368	**	**	**	325	**	**	**	**	**
Applications Programming																							
Manager/Supervisor	(25)	714	**	592	**	721	664	720	**	**	**	**	**	**	695	**	**	**	513	**	**	**	**
Lead	(26)	582	**	447	**	486	554	586	**	561	550	538	666	523	640	**	635	540	472	565	584	**	519
Senior	(27)	472	491	378	459	429	485	530	509	440	442	484	522	479	595	506	518	445	392	438	516	456	486
Junior	(28)	402	419	355	379	369	399	399	422	397	380	368	407	355	464	353	402	379	336	327	453	389	376
Trainee	(29)	325	315	261	294	283	251	357	387	308	336	303	385	323	419	336	349	297	304	**	429	**	**
Data Communications																							
Manager	(30)	**	**	517	**	554	**	**	508	612	552	684	**	**	**	**	571	**	**	**	**	**	**
Operator	(31)	**	410	**	**	386	**	**	363	303	**	430	441	427	481	**	**	**	**	**	**	**	**
Computer Operations																							
Manager/Supervisor	(32)	520	498	539	522	604	454	554	650	442	544	508	654	509	543	541	538	482	496	549	566	394	516
Lead Operator	(33)	380	367	351	378	429	380	406	420	346	362	367	569	354	452	440	367	359	338	406	434	304	382
Senior Operator	(34)	364	304	308	313	374	320	325	381	314	319	328	407	307	363	360	323	318	293	343	362	278	323
Junior Operator	(35)	321	237	245	271	315	278	283	311	258	220	260	394	278	292	275	272	268	245	269	281	224	261
I/O Control Manager	(36)	**	292	385	299	359	**	325	485	253	265	329	571	264	344	403	413	331	**	352	371	**	**
Tape Librarian	(40)	**	241	324	**	305	303	262	384	291	333	267	387	**	326	**	288	338	**	**	284	**	**
Key Entry																							
Supervisor	(41)	362	391	297	356	345	347	353	388	337	325	382	476	347	376	385	395	375	340	367	371	286	310
Lead Operator	(42)	291	292	280	330	280	313	281	325	288	255	266	387	277	342	315	305	324	246	309	321	247	286
Senior Operator	(43)	238	263	261	290	258	268	262	278	252	250	226	319	260	305	282	272	275	221	276	287	245	239
Junior Operator	(44)	226	218	226	200	206	207	189	199	225	181	220	223	221	266	218	237	215	194	241	250	220	209

(No. Firms)

** Indicates insufficient information available